

76. A method according to Claim 63 wherein said vesicles comprise lipids.
77. A method according to Claim 76 wherein said vesicle composition comprises vesicles selected from the group consisting of micelles and liposomes.
78. A method according to Claim 76 wherein said lipids comprise phospholipids.
79. A method according to Claim 78 wherein said phospholipids are selected from the group consisting of phosphatidylcholine, phosphatidylethanolamine and phosphatidic acid.
- a 80. A method according to Claim 79 wherein said phosphatidylcholine is selected from the group consisting of dioleoylphosphatidylcholine, dimyristoylphosphatidylcholine, dipalmitoylphosphatidylcholine and distearoylphosphatidylcholine.
- 1 81. A method according to Claim 80 wherein said phosphatidylcholine comprises dipalmitoylphosphatidylcholine.
82. A method according to Claim 79 wherein said phosphatidylethanolamine is selected from the group consisting of dipalmitoylphosphatidylethanolamine, dioleoylphosphatidylethanolamine, N-succinyldioleoylphosphatidylethanolamine and 1-hexadecyl-2-palmitoylglycerophosphoethanolamine.
83. A method according to Claim 82 wherein said phosphatidylethanolamine comprises dipalmitoylphosphatidylethanolamine.
84. A method according to Claim 79 wherein said phosphatidic acid comprises dipalmitoylphosphatidic acid.
85. A method according to Claim 75 wherein said lipid further comprises a polymer.
86. A method according to Claim 85 wherein said polymer comprises a hydrophilic polymer.

87. A method according to Claim 86 wherein said hydrophilic polymer comprises polyethylene glycol.

88. A method according to Claim 63 wherein said vesicles comprise proteins.

89. A method according to Claim 88 wherein said proteins comprise albumin.

90. A method according to Claim 63 wherein said vesicles comprise polymers.

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91. A method according to Claim 90 wherein said polymers comprise synthetic polymers or copolymers which are prepared from monomers selected from the group consisting of poly-lactic acid, poly-lactide, poly-lactide co-glycolide, acrylic acid, methacrylic acid, ethyleneimine, crotonic acid, acrylamide, ethyl acrylate, methyl methacrylate, 2-hydroxyethyl methacrylate, lactic acid, glycolic acid, ϵ -caprolactone, acrolein, cyanoacrylate, bisphenol A, epichlorhydrin, hydroxyalkylacrylates, siloxane, dimethylsiloxane, ethylene oxide, ethylene glycol, hydroxyalkylmethacrylates, N-substituted acrylamides, N-substituted methacrylamides, N-vinyl-2-pyrrolidone, 2,4-pentadiene-1-ol, vinyl acetate, acrylonitrile, styrene, p-amino-styrene, p-aminobenzylstyrene, sodium styrene sulfonate, sodium 2-sulfoxyethyl-methacrylate, vinyl pyridine, aminoethyl methacrylates and 2-methacryloyloxytrimethyl-ammonium chloride.

92. A method according to Claim 90 wherein said polymers comprise synthetic polymers or copolymers selected from the group consisting of polyacrylic acid, polyethyleneimine, polymethacrylic acid, polymethylmethacrylate, polysiloxane, polydimethylsiloxane, polylactic acid, poly(ϵ -caprolactone), epoxy resin, poly(ethylene oxide), poly(ethylene glycol), polyamide, polyvinylidene-polyacrylonitrile, polyvinylidene-polyacrylonitrile-polymethylmethacrylate and polystyrene-polyacrylonitrile.

93. A method according to Claim 92 wherein said polymers comprise polyvinylidene-polyacrylonitrile copolymer.

94. A method according to Claim 63 wherein said gas comprises a fluorinated gas.

95. A method according to Claim 94 wherein said fluorinated gas is selected from the group consisting of a perfluorocarbon and sulfur hexafluoride.

96. A method according to Claim 95 wherein said fluorinated gas comprises a perfluorocarbon.

97. A method according to Claim 96 wherein said perfluorocarbon gas is selected from the group consisting of perfluoromethane, perfluoroethane, perfluoropropane, perfluorobutane and perfluorocyclobutane.

98. A method according to Claim 63 wherein said gaseous precursor has a boiling point of greater than about 37°C.

99. A method according to Claim 98 wherein said gaseous precursor comprises a fluorinated compound.

100. A method according to Claim 99 wherein said fluorinated compound comprises a perfluorocarbon.

101. A method according to Claim 100 wherein said perfluorocarbon is selected from the group consisting of perfluoropentane and perfluorohexane.

102. A method according to Claim 63 wherein said vesicle composition is administered to the patient at a rate of from about 1×10^6 to less than about 8×10^6 vesicles/Kg-sec.

103. A method according to Claim 102 wherein said vesicle composition is administered at a rate of from about 1×10^6 to about 7×10^6 vesicles/Kg-sec.

104. A method according to Claim 103 wherein said vesicle composition is administered at a rate of from about 1.5×10^6 to about 6×10^6 vesicles/Kg-sec.

105. A method according to Claim 104 wherein said vesicle composition is administered at a rate of from about 2×10^6 to about 5.5×10^6 vesicles/Kg-sec.

106. A method according to Claim 105 wherein said vesicle composition is administered at a rate of from about 2.5×10^6 to about 5×10^6 vesicles/Kg-sec.

107. A method according to Claim 106 wherein said vesicle composition is administered at a rate of from about 3×10^6 to about 4.5×10^6 vesicles/Kg-sec.

108. A method according to Claim 63 wherein said vesicle composition is administered to the patient at a rate of from about 1×10^{-7} to about 3×10^{-3} cc gas/Kg-sec.

109. A method according to Claim 108 wherein said vesicle composition is administered at a rate of from about 3×10^{-6} to about 3×10^{-3} cc gas/Kg-sec.

110. A method according to Claim 109 wherein said vesicle composition is administered at a rate of from about 4×10^{-6} to about 2×10^{-3} cc gas/Kg-sec.

111. A method according to Claim 110 wherein said vesicle composition is administered at a rate of from about 8×10^{-6} to about 2×10^{-3} cc gas/Kg-sec.

112. A method according to Claim 111 wherein said vesicle composition is administered at a rate of from about 1×10^{-5} to about 1×10^{-3} cc gas/Kg-sec.

113. A method according to Claim 112 wherein said vesicle composition is administered at a rate of from about 4×10^{-5} to about 1×10^{-3} cc gas/Kg-sec.

114. A method according to Claim 113 wherein said vesicle composition is administered at a rate of from about 8×10^{-5} to less than about 1×10^{-3} cc gas/Kg-sec.

115. A method according to Claim 114 wherein said vesicle composition is administered at a rate of from about 1×10^{-4} to about 9×10^{-4} cc gas/Kg-sec.